AMENDMENT TO THE CLAIMS

Please amend the presently pending claims as follows:

1. (Currently Amended) An apparatus for counteracting self discharge in a storage battery, comprising:

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input electrically coupled to the charge supply battery and an output configured to directly electrically couple to terminals of the storage battery without any intervening electrical measurement components between the DC-DC converter circuit and the storage battery;

wherein the charge supply battery is of a different type and construction than the storage battery.

2. (Original) The apparatus of claim 1 wherein the DC-DC converter circuit comprises a transformer configured to step up the supply voltage.

3. (Original) The apparatus of claim 2 wherein the DC-DC converter further comprises a bridge rectifier circuit configured to provide rectification of the stepped up supply voltage provided by the transformer.

4. (Original) The apparatus of claim 1 wherein the DC-DC converter circuit includes a transistor.

5. (Original) The apparatus of claim 1 wherein the DC-DC converter circuit includes a charge storage device.

6. (Original) The apparatus of claim 5 wherein the charge storage device is a capacitor.

7. (Original) The apparatus of claim 1 wherein the charge supply battery is a single cell.

8. (Original) The apparatus of claim 1 wherein the charge supply battery includes a plurality of cells.

9. (Original) The apparatus of claim 8 wherein the plurality of cells is two cells.

10. (Previously Presented) The apparatus of claim 1 wherein the charge supply battery is a "D" cell alkaline battery and the storage battery is a lead acid battery.

11. (Previously Presented) The apparatus of claim 1 wherein the charge supply battery includes a plurality of "D" cell alkaline batteries and the storage battery is a lead acid battery.

12. (Previously Presented) The apparatus of claim 11 wherein the plurality of "D" cell alkaline batteries is two "D" cell alkaline batteries and the storage battery is a lead acid battery.

13. (Previously Presented) The apparatus of claim 1 wherein the charge supply battery is a "AA" alkaline battery and the storage battery is a lead acid battery.

14. (Previously Presented) The apparatus of claim 1 wherein the charge supply battery includes a plurality of "AA" alkaline batteries and the storage battery is a lead acid battery.

15. (Previously Presented) The apparatus of claim 14 wherein the plurality of "AA" alkaline batteries is two "AA" alkaline batteries and the storage battery is a lead acid battery.

16. (Previously Presented) The apparatus of claim 1 wherein the charge supply battery is a "C" cell alkaline battery and the storage battery is a lead acid battery.

17. (Previously Presented) The apparatus of claim 1 wherein the charge supply battery includes

a plurality of "C" cell alkaline batteries and the storage battery is a lead acid battery.

18. (Previously Presented) The apparatus of claim 1 wherein the plurality of "C" cell alkaline batteries is two "C" cell alkaline batteries and the storage battery is a lead acid battery.

19-22. (Canceled)

23. (Previously Presented) A jump-start booster pack, comprising:

a booster battery configured to provide starting energy to a vehicle;

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input electrically coupled to the charge supply battery and an output electrically coupled to the booster battery;

wherein the charge supply battery is of a different type and construction than the booster battery.

24. (Original) The apparatus of claim 23 wherein the charge supply battery is a single cell.

25. (Original) The apparatus of claim 23 wherein the charge supply battery includes a plurality of cells.

26. (Original) The apparatus of claim 25 wherein the plurality of cells is two cells.

27. (Previously Presented) The apparatus of claim 23 wherein the charge supply battery is a "D" cell alkaline battery and the booster battery is a lead acid battery.

28. (Previously Presented) The apparatus of claim 23 wherein the charge supply battery includes a plurality of "D" cell alkaline batteries and the booster battery is a lead acid battery.

29. (Previously Presented) The apparatus of claim 28 wherein the plurality of "D" cell alkaline batteries is two "D" cell alkaline batteries and the booster battery is a lead acid battery.

30. (Previously Presented) The apparatus of claim 23 wherein the charge supply battery is a "AA" alkaline battery and the booster battery is a lead acid battery.

31. (Previously Presented) The apparatus of claim 23 wherein the charge supply battery includes a plurality of "AA" alkaline batteries and the booster battery is a lead acid battery.

32. (Previously Presented) The apparatus of claim 31 wherein the plurality of "AA" alkaline batteries is two "AA" alkaline batteries and the booster battery is a lead acid battery.

33. (Previously Presented) The apparatus of claim 23 wherein the charge supply battery is a "C" cell alkaline battery and the booster battery is a lead acid battery.

34. (Previously Presented) The apparatus of claim 23 wherein the charge supply battery includes a plurality of "C" cell alkaline batteries and the booster battery is a lead acid battery.

35. (Previously Presented) The apparatus of claim 34 wherein the plurality of "C" cell alkaline batteries is two "C" cell alkaline batteries and the booster battery is a lead acid battery.

36. (Original) The apparatus of claim 23 further comprising battery charging circuitry configured to charge a vehicle battery.

37. (Original) The apparatus of claim 36 wherein the battery charging circuitry is further configured to charge the booster battery.

38. (Original) The apparatus of claim 36 where the battery charging circuitry is coupled to the

vehicle battery through a four point Kelvin connection.

39. (Original) The apparatus of claim 23 further comprising battery testing circuitry configured to test a vehicle battery.

40. (Original) The apparatus of claim 39 wherein the battery testing circuitry is further configured to test the booster battery.

41. (Original) The apparatus of claim 39 wherein the battery testing circuitry is coupled to the vehicle battery through a four point Kelvin connection.

42-45. (Canceled)

46. (Previously Presented) A method for counteracting self discharge in a storage battery, comprising:

providing a supply voltage from a charge supply battery that is of a different type and construction than the storage battery; and

providing a charging voltage to the storage battery as a function of the supply voltage, with the charging voltage having a magnitude greater than a magnitude of the supply voltage.

47.(Original) The method of claim 46 wherein providing the charging voltage is carried out by a DC-DC converter circuit.

48.(Original) The method of claim 47 wherein the DC-DC converter circuit comprises a transformer configured to step up the supply voltage.

49.(Original) The method of claim 48 wherein the DC-DC converter further comprises a bridge

rectifier circuit configured to provide rectification of the stepped up supply voltage provided by the transformer.

50.(Original) The method of claim 47 wherein the DC-DC converter circuit includes a transistor.

51.(Original) The method of claim 47 wherein the DC-DC converter circuit includes a charge storage device.

52. (Original) The method of claim 51 wherein the charge storage device is a capacitor.

53. (Original) The method of claim 46 wherein the charge supply battery is a single cell.

54. (Original) The method of claim 46 wherein the charge supply battery includes a plurality of cells.

55. (Original) The method of claim 54 wherein the plurality of cells is two cells.

56.(Previously Presented) The method of claim 46 wherein the charge supply battery is a "D" cell alkaline battery and the storage battery is a lead acid battery.

57. (Previously Presented) The method of claim 46 wherein the charge supply battery includes a plurality of "D" cell alkaline batteries and the storage battery is a lead acid battery.

58. (Previously Presented) The method of claim 57 wherein the plurality of "D" cell alkaline batteries is two "D" cell alkaline batteries and the storage battery is a lead acid battery.

59. (Previously Presented) The method of claim 46 wherein the charge supply battery is a "AA" alkaline battery and the storage battery is a lead acid battery.

60. (Previously Presented) The method of claim 46 wherein the charge supply battery includes a plurality of "AA" alkaline batteries and the storage battery is a lead acid battery.

61. (Previously Presented) The method of claim 60 wherein the plurality of "AA" alkaline batteries is two "AA" alkaline batteries and the storage battery is a lead acid battery.

62. (Previously Presented) The method of claim 46 wherein the charge supply battery is a "C" cell alkaline battery and the storage battery is a lead acid battery.

63. (Previously Presented) The method of claim 46 wherein the charge supply battery includes a plurality of "C" cell alkaline batteries and the storage battery is a lead acid battery.

64. (Previously Presented) The method of claim 63 wherein the plurality of "C" cell alkaline batteries is two "C" cell alkaline batteries and the storage battery is a lead acid battery.

65-68.(Canceled)

69. (Previously Presented) A method of making a jump-start booster pack, comprising:

providing a booster battery configured to provide starting energy to a vehicle;

providing a charge supply battery configured to provide a supply voltage; and

providing a DC-DC converter circuit having an input electrically coupled to the charge supply battery and an output electrically coupled to the booster battery;

wherein the charge supply battery is of a different type and construction than the booster battery.

70. (Original) The method of claim 69 wherein providing the charge supply comprises providing a single cell battery.

71. (Original) The method of claim 69 wherein providing the charge supply battery comprises providing a "D" cell alkaline battery.

72. (Original) The method of claim 69 further comprising providing battery charging circuitry configured to charge a vehicle battery.

73. (Original) The method of claim 72 wherein the battery charging circuitry is further configured to charge the booster battery.

74. (Original) The method of claim 72 further comprising coupling the battery charging circuitry to the vehicle battery through a four point Kelvin connection.

75. (Original) The method of claim 69 further comprising providing battery testing circuitry configured to test a vehicle battery.

76. (Original) The method of claim 75 wherein the battery testing circuitry is further configured to test the booster battery.

77. (Original) The method of claim 75 further comprising coupling the battery testing circuitry to the vehicle battery through a four point Kelvin connection.

78-81. (Canceled)

82. (Previously Presented) The apparatus of claim 1 wherein the storage battery is a carbon battery and the charge supply battery is an alkaline battery.

83. (Previously Presented) The apparatus of claim 82 wherein the carbon battery comprises at

least one carbon coated battery electrode.

84. (Previously Presented) The apparatus of claim 83 further comprising a chemically active paste disposed on the at least one carbon coated battery electrode.

85. (Previously Presented) The apparatus of claim 82 wherein the carbon battery comprises at least one carbon foam current collector including a network of pores.

86. (Previously Presented) The apparatus of claim 85 further comprising a chemically active paste disposed on the carbon foam current collector such that the chemically active paste penetrates into the network of pores.

87. (Previously Presented) The apparatus of claim 1 wherein the storage battery is a nickel-metal hydride battery and the charge supply battery is an alkaline battery.

88. (Previously Presented) The apparatus of claim 1 wherein the storage battery is a nickel cadmium battery and the charge supply battery is an alkaline battery.

89. (Previously Presented) The apparatus of claim 1 wherein the storage battery is a lithium ion battery and the charge supply battery is an alkaline battery.

90. (Previously Presented) The apparatus of claim 1 wherein the storage battery is a lead-acid battery and the charge supply battery is an alkaline battery.

91. (Previously Presented) The apparatus of claim 1 configured to counteract self-discharge in a 6-cell storage battery.

92. (Previously Presented) The apparatus of claim 1 configured to counteract self-discharge in

a 12-cell storage battery.

93. (Previously Presented) The apparatus of claim 1 configured to counteract self-discharge in an 18-cell storage battery.

94. (Previously Presented) The apparatus of claim 1 configured to counteract self-discharge in a 24-cell storage battery.

95. (Previously Presented) The apparatus of claim 23 wherein the booster battery is a Thin Metal Film lead-acid battery and the charge supply battery is an alkaline battery.

96. (Previously Presented) The apparatus of claim 23 wherein the booster battery is a carbon battery and the charge supply battery is an alkaline battery.

97. (Previously Presented) The apparatus of claim 96 wherein the carbon battery comprises at least one carbon coated battery electrode.

98. (Previously Presented) The apparatus of claim 97 further comprising a chemically active paste disposed on the at least one carbon coated battery electrode.

99. (Previously Presented) The apparatus of claim 96 wherein the carbon battery comprises at least one carbon foam current collector including a network of pores.

100. (Previously Presented) The apparatus of claim 99 further comprising a chemically active paste disposed on the carbon foam current collector such that the chemically active paste penetrates into the network of pores.

101. (Previously Presented) The method of claim 46 wherein the storage battery is a carbon

battery and the charge supply battery is an alkaline battery.

102. (Previously Presented) The method of claim 101 wherein the carbon battery comprises at least one carbon coated battery electrode.

103. (Previously Presented) The method of claim 102 further comprising a chemically active paste disposed on the at least one carbon coated battery electrode.

104. (Previously Presented) The method of claim 101 wherein the carbon battery comprises at least one carbon foam current collector including a network of pores.

105. (Previously Presented) The method of claim 104 further comprising a chemically active paste disposed on the carbon foam current collector such that the chemically active paste penetrates into the network of pores.

106. (Previously Presented) The method of claim 43 employed to counteract self-discharge in a 6-cell storage battery.

107. (Previously Presented) The method of claim 43 employed to counteract self-discharge in a 12-cell storage battery.

108. (Previously Presented) The method of claim 43 employed to counteract self-discharge in an 18-cell storage battery.

109. (Previously Presented) The method of claim 43 employed to counteract self-discharge in a 24-cell battery.

110. (Previously Presented) The method of claim 69 wherein the booster battery is a Thin Metal

film lead acid battery and the charge supply battery is an alkaline battery.

111. (Previously Presented) The method of claim 69 wherein the booster battery is a carbon battery and the charge supply battery is an alkaline battery.